

CLAIMS LISTING

Claim 1
(currently amended)

A device for dispensing a product resulting from mixing at least two liquid substances that react with each other upon contact to create gas and to thereby create a pressure that would cause a gas backflow pressure capable of causing damage to a portion of said device, said device comprising:

- (a) an elongated sheath forming an essentially closed mixing and reaction chamber;
- (b) a dispensing orifice located at an end of said sheath for dispensing said product;
- (c) a check valve in essentially sealed relationship with said sheath, being secured to said sheath, and located at an end of said sheath opposite to said dispensing orifice for preventing backflow of said gas, said check valve having at least [one] two admitting openings to admit said liquid substances from a feeding system, an open interior portion for passing said substances through said check valve, and at least one exit opening to permit said substances to pass into said chamber, said check valve further comprising a closing element to close said exit opening upon creation of backflow pressure within said chamber thereby preventing damage to said feeding system, said closing element comprising a rod having a shaft and closing end, said rod capable of axial movement due to pressure created within said check valve whereby said closing

end is capable of being moved to close said check valve against back pressure created within said mixing and reaction chamber;

- (d) a static mixer for mixing said substances and located within said chamber between said dispensing orifice and said check valve; and
- (e) a feeding system connected to said check valve for feeding said substances into said check valve.

Claim 2
(currently amended)

The device of claim 1, wherein said check valve [is] has a round cross section [a plug-like member fitted] and is dimensioned so that an interference fit is obtained when said check valve is inserted into said elongated sheath and secured to said elongated sheath.

Claim 3
(canceled)

Claim 4
(currently amended)

A method of dispensing a reaction product comprising cured polyurethane formed from reaction of least two liquid substances, said liquid substances comprising polymethylene polyphenyl isocyanate and 4,4 diphenylmethane diisocyanate as a curing agent, comprising:

- (a) feeding at least said two liquid substances from a feeding system into a check valve located at an end of a mixing and reaction chamber of a dispensing device, said device comprising:

- (i) an elongated sheath forming an essentially closed mixing and reaction chamber;
- (ii) a dispensing orifice located at an end of said sheath for dispensing said product;
- (iii) a check valve in essentially sealed relationship with said sheath, being secured to said sheath, and located at an end of said sheath opposite to said dispensing orifice for preventing backflow of said gas, said check valve having at least two admitting openings to admit said substances from a feeding system, an open interior portion for passing said substances through said check valve, and at least one exit opening to permit said substances to pass into said chamber, said check valve further comprising a closing element to close said exit opening upon creation of backflow pressure within said chamber thereby preventing damage to said feeding system, said closing element comprising a rod having a shaft and closing end, said rod capable of axial movement due to pressure created within said check valve whereby said closing end is capable of being moved to close said check valve against back pressure created within said mixing and reaction chamber; and
- (iv) a static mixer for mixing said substances and located within said chamber between said dispensing orifice and said check valve;

- (b) passing said liquid substances through said check valve and into said chamber [which contains a static mixer] where said substances are mixed and react with each other to form [a reaction product,] said polypurethane and including a gas, thereby creating an internal pressure on the order of 45 psi and higher within said chamber;
- (c) dispensing said product from said device;
- (d) ceasing feeding said substances into said check valve and said chamber, whereby a back pressure is created in said chamber;
- (e) preventing said back pressure from entering into said feeding system, and thereby avoiding damaging said system by closing said check valve, said check valve being closed due to said back pressure; and
- (f) continuing to dispense said reaction product.

Claim 5
(canceled)

Claim 6
(canceled)

Claim 7
(currently amended)

The method of claim [6] 4 further comprising dispensing said cured polyurethane into a water leak to seal said leak.

Claim 8
(previously presented)

The method of claim 7, wherein said leak is up to about 150 gallons per minute or higher.

Claim 9
(previously presented)

The method of claim 8, wherein said leak is from about 5 to about 150 gallons per minute.

Claim 10
(new)

The method of claim 4, wherein said check valve has a round cross section and is dimensioned so that an interference fit is obtained when said check valve is inserted into said elongated sheath and secured to said elongated sheath.

Claim 11
(new)

The method of claim 4, wherein said check valve is secured by an adhesive.

Claim 12
(new)

The device of claim 1, wherein said check valve is secured by an adhesive.

Claim 13
(new)

The method of claim 4, wherein said check valve is secured by crimping a back portion of said elongated sheath.

Claim 14
(new)

The device of claim 1, wherein said check valve is secured by crimping a back portion of said elongated sheath.